

Skull: greatest length 15; basal length 12·9; orbital breadth 8; intertemporal breadth 4·9; breadth of brain-case 8·2; nasal notch 3·3 × 2·5; palate from bottom of prepalatal notch 5; front of upper canine to back of *m.*<sup>3</sup> 6; front of lower canine to back of *m.*<sub>3</sub> 6·5.

*Hab.* Kitui, British East Africa; altitude 3500 feet.

*Type.* Male. B.M. no. 1. 2. 5. 1. Original number 63. Collected 26th November, 1900, by S. L. Hinde.

Its larger size and different colour will readily distinguish this species from its nearest ally *S. hirundo*.

XXXIV.—*Descriptions of some new Species of Heterocera.*

By W. SCHAUS, F.Z.S.

Fam. Arctiidae.

*Hyperthæma albipuncta.*

Head and thorax brown. Abdomen roseate; a lateral row of black spots. Primaries reddish brown, with fine wavy transverse shadings; fringe black at the base, white terminally; a white spot, circled with black, near the base and below the median vein; a minute black spot beyond the cell between veins 4 and 5. Secondaries greyish brown, the fringe white.

Expanse 32 millim.

*Hab.* São Paulo, Brazil.

*Hyperthæma hæmacta.*

Palpi crimson. Head and thorax orange; two black points on collar. Abdomen red; two rows of black spots laterally. Primaries red, shaded with brown towards apex; costa finely brown; fringe dark grey; a black point at the base, a round white spot circled with black below the median vein, and a similar larger spot beyond the cell between veins 5 and 6. Secondaries brown, streaked with white at the base.

Expanse 35 millim.

*Hab.* Costa Rica.

*Neritos sanguipuncta.*

Palpi yellow, outwardly roseate. Head brown; vertex yellow. Thorax brown. Abdomen roseate, underneath yellow. Legs yellow. Primaries: the base from the costa at one third to the inner angle brown, outwardly edged with reddish; a crimson spot about the middle of the submedian

vein; the rest of the wing pale yellow except a large sub-apical irregular brown spot faintly edged with reddish. Secondaries brownish yellow.

Expanse 32 millim.

*Hab.* Palanda, Ecuador.

*Robinsonia polyplagia.*

Palpi white, laterally edged with brown and circled with brown at joints. Frons, collar, and patagia white, edged with brown. Thorax posteriorly fulvous, with a large white dorsal spot. Abdomen fulvous. Primaries light brown, streaked with white along costa, in cell, and on the inner margin; a large oval white spot below median vein near base; a large triangular white spot beyond cell and two elongated white spots at apex; elongated white spots along the outer margin, the spot at inner angle being the largest. Secondaries white.

Expanse 39 millim.

*Hab.* Aroa, Venezuela.

*Halisidota perdentata.*

*Male.*—Antennæ deeply pectinated. Pale fawn-colour. Primaries crossed by indistinct and dentate transverse lines, the outer lines geminate; a terminal row of oval spots between the veins. Secondaries fawn-colour; the inner margin broadly clouded with slightly darker scales. The female is larger, slightly darker, and the subterminal line is very deeply angulate; the anal tuft is very large and thick.

Expanse, ♂ 41, ♀ 55 millim.

*Hab.* Orizaba, Mexico.

*Halisidota huaco.*

Frons and vertex brown; thorax buff; abdomen brown. Primaries buff, thinly irrorated with dark scales; the inner and outer lines indistinct, dentate, the latter followed by a dark shading; a black point at the origin of veins 3, 4, and 5; a subapical shade; subterminal and terminal dark spots between the veins. Secondaries whitish, the inner and outer margins broadly smoky grey.

Expanse 32 millim.

*Hab.* Rio Janeiro, Castro, Parana.

*Halisidota arenacea.*

Head, collar, and abdomen pale ochreous, the thorax and abdomen subdorsally at base with still paler hairs; third joint of palpi black; a black point on vertex; two black

points laterally on patagia; a lateral row of black points on abdomen. Primaries pale ochreous, the veins darker. Secondaries whitish, semihyaline; the veins and fringe slightly yellowish.

Expanse 51 millim.

*Hab.* Loja, Ecuador.

*Halisidota pallida*.

Head, collar, thorax, and subdorsal basal hairs on abdomen greyish fawn-colour; abdomen yellowish, with an outer row of large black spots and a lateral row of black points; legs greyish fawn-colour, black points on fore coxæ; palpi with third joint brown and lateral brown spots. A black point on frons and one on vertex; three black points on patagia. Primaries greyish fawn-colour; a black point at base of costa. Secondaries whitish, semihyaline.

Expanse 52 millim.

*Hab.* Loja, Ecuador.

*Amastus coccinator*.

Palpi crimson, tipped with brown. Frons white; vertex red. Collar and patagia dark ochreous, the former edged with white anteriorly, the latter inwardly edged with white. Thorax crimson above and below. Tibia crimson; tarsi greyish. Abdomen reddish dorsally, ochreous on last segment, grey ventrally. Primaries roseate brown, thinly scaled in the disk; an indistinct dark spot at the end of the cell; a paler subterminal shade. Secondaries whitish, thinly scaled; faintly brownish on outer margin; the inner margin with roseate hairs.

Expanse 70 millim.

*Hab.* Colombia.

*Amastus adela*.

Palpi roseate, tipped with black. Head roseate; a black spot on vertex; collar roseate, crossed by black streaks, which continue on the patagia, leaving a central roseate line on each patagium. Thorax crimson, with a dorsal black line. Abdomen black dorsally and ventrally, crimson laterally spotted with black; the anal segment crimson. Primaries dark olivaceous brown, some roseate spots at the base; an inner row of elongated pale roseate spots; an outer irregular row of round white spots; a costal median spot divided by the costal vein; a broad subterminal white band broken by the black veins; the margin terminally olivaceous brown; the fringe slightly darker. Secondaries thinly scaled,

olivaceous brown; some subterminal white spots between the apex and vein 2.

Expanse 46 millim.

*Hab.* Castro, Parana.

*Ischnocampa nigradorsata.*

Palpi and legs brown. Body yellow, except a large black dorsal space on abdomen, which is also brown ventrally. Primaries white, the veins brown. Secondaries light grey, the veins brown.

Expanse 39 millim.

*Hab.* Peru.

*Ischnocampa nigrivena.*

Palpi brown. Body ochre-yellow, some brown on abdomen ventrally. Tibia outwardly and tarsi brown. Primaries yellow; the costal and inner margins tinged with lilacine, the veins black. Secondaries pale yellow, the veins brownish.

Expanse 58 millim.

*Hab.* Suapi.

*Turuptiana obscura.*

Head, legs, and thorax dark brown; collar and patagia ochreous brown. Abdomen black dorsally, otherwise yellow, with a lateral row of black spots. Primaries brown, the veins cream-colour; the lines, which are broad on costa, black; a basal interrupted line; the inner line much curved, interrupted in cell; the median line angled on median vein, outwardly curved on inner margin; the outer line much curved beyond cell, inwardly oblique to submedian, then outwardly angled; an irregular, subterminal, interrupted band partly edged with cream-colour; the outer margin ochreous brown. Secondaries yellow, with median and sub-terminal interrupted blackish bands.

Expanse 36 millim.

*Hab.* Peru.

*Hylarctia sericea.*

Palpi yellowish white circled with black. Fore tibia yellow, spotted with black; legs otherwise pale yellow; tarsi white circled with black. Body whitish yellow. Primaries pale silky yellow, the veins darker; a black and orange spot at base. Secondaries whitish.

Expanse 37-44 millim.

*Hab.* Castro, Parana.

Very similar in appearance to *Munonia iridescens*, Sch.

*Mænas bilinea.*

Dark olivaceous brown. Abdomen with a lateral yellow band. Primaries crossed by three dark and thick lines, the inner angled on median vein, the outer and subterminal slightly wavy and close together; a black crescent-shaped mark at the end of the cell. Secondaries with a subterminal dark line and a dark crescent-shaped line at the end of the cell. All the fringes darker at base.

Expanse 40 millim.

*Hab.* Castro, Parana.

*Antarctia fervida.*

Ochreous brown. Abdomen with transverse black dorsal bands. Primaries: the veins and line at end of cell dark brown. Secondaries somewhat translucent at base and irrorated with grey scales.

Expanse, ♀, 48 millim.

*Hab.* Petropolis, Castro, Brazil.

*Holomelina trigonifera.*

Body black; base of palpi underneath orange; patagia outwardly orange; abdomen with a lateral reddish-orange streak. Primaries black, except the basal half above the submedian vein, which is yellow. Secondaries black, with a large basal costal spot, which is reddish yellow.

Expanse 23 millim.

*Hab.* Guadalajara, Mexico.

*Holomelina cocciniceps.*

Body greyish brown; base of palpi, vertex, back of head, and base of patagia crimson. Primaries above olivaceous brown; the basal half of costa finely crimson. Secondaries crimson, the outer margin broadly and evenly bordered with black, slightly intermingled with crimson scales. Underneath the primaries are red; the apex, outer and inner margin light brown. Secondaries as above.

Expanse 30 millim.

*Hab.* Manitou, Colorado.

## Fam. Hysidæ.

*Pericopsis biformis.*

*Male.*—Body blackish; four pale yellow spots on collar and a small darker yellow spot on patagium. Abdomen with

two rows of yellow spots below and some crimson scales on anal segment. Primaries dark brownish grey; a median angular black transverse line; a black spot on costa beyond the cell, followed by a curved pale yellow band from costa to outer margin above vein 3; the apex and a large space from inner angle to vein 3 darker; some indistinct terminal yellowish spots. Secondaries yellow or roseate, the margin narrowly black, but more widely so at apex. Underneath there are crimson spots at the base of costal margins and a reddish quadrate spot at end of cell on primaries.

*Female*.—Darker, with only the yellow band distinct on primaries. Secondaries black, with a curved subterminal red band, not reaching the inner margin.

Expanse, ♂ 53, ♀ 60 millim.

*Hab.* Castro, Parana.

### XXXV.—On *Sciurus caniceps* and allied Species.

By J. L. BONHOTE, B.A.

THE squirrels called "*Sciurus caniceps*" and its allies have been less confused with a mass of names than those of some of the other groups with which I have dealt; this is no doubt due to the fact that a well-marked change of pelage was known to take place and the nearly allied forms were supposed to be specimens in various stages of change; thanks, however, to a large series at the British Museum, as well as to a considerable number of specimens brought home from the Malay Peninsula by the "Skeat Expedition" and now in the Cambridge Museum, I have been enabled to arrive at certain conclusions, which will, I trust, cause the various forms of this group to be more easily understood.

In the first place five species may be recognized, viz.:—

- (i.) *Sc. caniceps* (the only species having a distinct breeding-dress), ranging through Burma, Siam, and the north of the Malay Peninsula.
- (ii.) *Sc. concolor*, a nearly allied species with no seasonal change, confined, so far as we are aware, to the Malay Peninsula, at the northern extremity of which it meets with *Sc. caniceps*.
- (iii.) *Sc. epomophorus*, sp. n., which ranges down the west coast of the Malay Peninsula from Bankasun to Malacca.
- (iv.) *Sc. pygerythrus*, from Burma and Tenasserim.
- (v.) *Sc. griseimanus*, from Cochin China.